



December 2, 2016

VIA ELECTRONIC MAIL

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**Re: Coffeyville Resources Nitrogen Fertilizers, LLC ("CRNF")
Response to U.S. Environmental Protection Agency ("EPA") Notice of
Noncompliance Received November 10, 2016**

Dear Ms. Stotts,

This letter responds to the Notice of Noncompliance issued to CRNF by EPA and received on November 10, 2016.

For the reasons described in CRNF's December 21, 2015 correspondence (Attachment 1) and the additional information provided below, CRNF does not believe the inspection report's findings amount to noncompliance with 40 CFR Part 68 and requests that EPA reconsider its findings. As one example, several of the inspection report's findings are premised on a misapplication of the ANSI standard, which does not apply to equipment that is part of the ammonia manufacturing process. See Responses to Items 2-3, 5. In other instances, the documentation provided to EPA during the inspection contained information demonstrating compliance with Part 68, despite the inspection report's observations. See Responses to Items 1, 2, 4, 6-7, and 9.

Notwithstanding the information CRNF has provided to respond to the inspection, the facility has taken numerous, specific actions to address EPA's concerns. These actions are described below and where appropriate, CRNF has included supporting documentation.

EPA Finding of Noncompliance and CRNF Response

- 1) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to review and update the offsite consequence analyses at least every 5 years, as required by 40 CFR 68.36.**

CRNF Response:

CRNF did not fail to review and update the offsite consequence analysis ("OCA"). The 2011 Risk Management Plan ("RMP") submission (1) used the most current census data; and (2) did

not identify any environmental receptors. CRNF's 2013 RMP update focused on the evaluation of an additional covered process. As discussed by CRNF in its December 2015 letter, the 2013 RMP update did not require a change in the worst case scenario or result in a new OCA. There were no scenarios identified in the evaluation for the 2013 RMP update that would result in a worst case scenario that would create an end point distance greater than the scenario from an atmospheric ammonia storage tank that was already included in the 2013 RMP update. See 68.36(a) and (b) listing the only two criteria triggering an OCA update.

In 2016, CRNF reviewed the population counts using MARPLOT, which is based on 2010 Census data from the U. S. Census Bureau, and statistical databases, including the Missouri Center Data Center database. The 2010 U. S. Census Bureau population for the City of Coffeyville (10,000 people) was appropriately used in the 2013 RMP update. The 2013 U. S. Census Bureau population for the City of Coffeyville, if it had been available at the time of the 2013 RMP update, would have resulted in a slightly lower population of 9,900 people.

Also, as part of its 2016 population review, CRNF again determined that no environmental receptors are within the end-point distance for the worst case (WCS) scenario of 2.9 miles, and therefore no update or resubmission was required.

- 2) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to compile current written process safety information as required by 40 CFR 68.85(a), specifically, the Process Safety Information standard references an obsolete electrical classification diagram and the recognized and generally accepted good engineering practices documentation letter does not include all methods and standards used to ensure that all plant equipment complies with recognized and generally accepted good engineering practices.**

CRNF Response:

- A) EPA indicated that CRNF failed to compile current written process safety information in the Process Safety Information Procedure. The diagram listed in the procedure was D12-0904A, the updated drawing is D001-0002A.**

As described in CRNF's December 21, 2015 response, drawing #D12-0904A provided the electrical classification for all six RMP covered processes. The drawing # D001-0002A provided to the EPA inspector was accurate and contained the electrical classification for the RMP covered processes.

Because drawing # D001-0002A (originally prepared to address a utilities project) does contain the required electrical classification of the RMP covered processes, CRNF has revised its Process Safety Information Procedure to include drawing # D001-0002A. It is provided at Attachment 2.

- B) EPA indicated the RAGAGEP documentation letter, document 0026, does not include all methods and standards used to ensure that all plant equipment complies with RAGAGEP.**

CRNF compiles written process safety information before conducting process hazard analyses ("PHAs") on its covered processes in accordance with 40 CFR 68.65(a). The equipment at the CRNF Plant was designed, engineered, constructed and installed in accordance with the

applicable codes, standards and industrial practices required for the safe and proper operation of the facility. The CRNF document 0026 (“RAGAGEP Documentation”) references the applicable codes and standards and demonstrates compliance for 68.65(d)(1)(vi) – “Information pertaining to the equipment in the process shall include design codes and standards employed.” CRNF considered incorporation of the ANSI standard, even though it is not applicable to ammonia manufacturing plants, but determined the standards included in its RAGAGEP Documentation satisfy the standards of 68.65.

EPA’s inspection report also notes that API 510 and API 653 were not referenced in the “RAGAGEP Documentation.” This is because API 510 and API 653 are standards for inspections for 68.73, not design and construction as PSI under 68.65. Therefore, it is expected that documentation demonstrating compliance with 68.65 would not mention these standards. Even EPA’s Inspection Report (page 8) observes that CRNF correctly references API 510 and API 653 in the facility’s Mechanical Integrity Manual addressing inspections.

- 3) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to document that the equipment complies with recognized and generally accepted good engineering practices, as required by 40 CFR 68.65(d)(2), specifically anhydrous ammonia piping lacked labeling and color coding, storage vessels lacked signage designating “inhalation hazard,” and the vessels lacked vehicular barriers.**

CRNF Response:

The inspection report alleges that CRNF did not comply with 68.65(d)(2) because it had not implemented practices recommended by ANSI K61.1-5.4.3. CRNF is not obligated to implement the practices under this standard because ANSI K61.1-5.4.3 does not apply to ammonia manufacturing facilities. The standard’s applicability is explicitly discussed in the “Introduction” to both the 1999 version of ANSI K61.1-5.4.3, as well as the updated 2014 version (CGA G-2.1-2014). Attachment 3.

Nevertheless, as described below, CRNF has taken steps to implement the ANSI standards even though it already has documented that its equipment complies with applicable recognized and generally accepted good engineering practices (i.e. API, NFPA).

A) EPA indicated that anhydrous ammonia piping lacked labeling and color coding.

As stated in CRNF’s December 2015 letter, its pressurized ammonia bullets do not have container openings other than pressure relief valves, which are exempted per ANSI K61.1-5.4.3. Nevertheless, CRNF has labeled and color-coded its pressurized ammonia piping. Pictures are included at Attachment 4A.

B) EPA indicated that the storage vessels lacked signage designating “Inhalation Hazard”.

As stated in CRNF’s December 2015 letter, the facility already complies with 40 CFR 68.65(d)(2) because its bullets display the NFPA 704 label. Nevertheless, CRNF has placed additional signage on the Ammonia Bullets indicating “Inhalation Hazard.” Pictures are included at Attachment 4B.

C) EPA indicated that vessels lacked suitable barricades for the Ammonia Bullets.

EPA's inspection report incorrectly states that the tank depicted in Photos 15-17 should apply the ANSI standard. Photos 15-17 show the ammonia feedtank. The ammonia feedtank is part of a process (UAN plant) and therefore, not obligated to apply ANSI, which is not applicable to manufacturing vessels.

EPA's inspection report further speculated that something had collided with the side of the ammonia feed tank depicted in Photo 16. A vehicle did not collide with the tank pictured in Photo 16. That tank experienced a break in its insulation, which CRNF subsequently repaired. This tank passed inspection in July 2016.

Plant access is controlled continuously for vehicular traffic. And, as indicated in CRNF's December 2015 letter, concrete barriers have been placed on the south side of the bullets to provide additional protection and to avoid damage by trucks or other vehicles. Pictures are included at Attachment 4C.

D) EPA indicated that the storage vessels pressure relief valves are not replaced or rebuilt every five years.

As described in CRNF's December letter, the facility relied upon API 510 for vessel and relief valve inspections because API 510 is consistent with applicable manufacturers' recommendations and good engineering practices. The ANSI standard is inapplicable (for the reasons described above) but CRNF has nevertheless revised the testing criteria for pressure safety valves ("PSVs") to every 5 years. The revised testing criteria is reflected CRNF's testing protocol spreadsheet at Attachment 4D.

4) Coffeyville Resources Nitrogen Fertilizers, LLC failed to address emergency operations in the standard operating procedures for the UAN plant, as required by 40 CFR 68.69(a)(1)(v).

The CRNF UAN Operating Procedures reviewed by the inspector included embedded emergency procedures throughout the document. CRNF has now broken the Emergency Procedures for the UAN process into a stand-alone document. The procedures are included at Attachment 5.

5) Coffeyville Resources Nitrogen Fertilizers, LLC failed to perform inspections and tests on process equipment consistent with good engineering practices, as required by 40 CFR 68.73(d)(3), specifically the pressure relief valves are replaced every six years rather than the required five years as specified in industry standard.

CRNF Response:

As described in the December 2015 letter, the CRNF mechanical integrity program referenced API 510 for vessel and relief valve inspections. API 510 is a widely recognized and generally accepted good engineering practice for maintenance and inspections. The ANSI standard is not applicable to the process equipment described in Doc 36 .

Nevertheless, CRNF has subsequently revised the testing criteria for the pressure relief valves to every 5 years. The revised testing criteria is reflected CRNF's testing protocol spreadsheet at Attachment 4D.

- 6) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to certify that they have evaluated compliance with the provisions of Subpart D with at least one person knowledgeable of the process during the January 2014 compliance audit, as required by 40 CFR 68.79(b).**

CRNF Response:

The CRNF 2014 Compliance Audit was conducted by a six-person team including a third-party contractor, CRNF employees and Wynnewood Refinery employees. Each team member was knowledgeable in the process and audit elements. Participating audit personnel held various professional certification, including professional engineer, and were experienced in various disciplines, including engineering, mechanical integrity, emergency response, operations, training, process safety, and safety. Department managers and technical staff also were participants in the audit process. As part of the auditing process, CRNF held discussions across the facility with over 23 contractors, operators, examiners, engineers, maintenance personnel, and supervisors, and made field observations in process areas.

CRNF will perform its next compliance audit in 2017 and ensure that the audit is conducted by qualified personnel, including at least one person knowledgeable of the process.

- 7) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to review investigation findings with affected contractors, as required by 40 CFR 68.81(f).**

CRNF Response:

As discussed in CRNF's December 21, 2015 response, the report was not reviewed with the two contractors referenced in EPA's inspection report because they were not "affected personnel whose job tasks are relevant to the incident findings." The incident was the result of a valve failure, specifically, the design of the valve and socket weld thickness. These two contractors were working close to the area to conduct a review for steam trap failure, and they were indirectly injured when evacuating the area. Therefore, CRNF did not review the incident findings with the contractors because the scope of their job tasks -- steam trap review -- was not relevant to the incident findings.

- 8) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to document that the contractors had understood the required training, as required by 40 CFR 68.87(c)(3).**

CRNF Response:

The CRNF Contractor Safety Exhibits and Procedures Manual address this requirement in multiple sections of the procedure. It outlines the requirements in the Contractor Entry Requirements and all prospective contractors must complete and submit a Pre-Qualification Form ("PQF") to evaluate safety performance and programs. During its inspection, the EPA

obtained two signed PQF examples that provided evidence that CRNF had evaluated the contract companies programs.

In 2014, CRNF began implementation of a third party service (ISNetworld) to enhance contractor safety management, including documentation and rating of the prequalification criteria set forth for contract companies. CRNF now fully implements ISNetworld. The service reviews and verifies the health, safety, and environmental programs submitted by the contractor companies to ensure compliance with regulatory and CRNF standards. Examples demonstrating ISNetworld's verification capabilities are included at Attachment 6.

- 9) **Coffeyville Resources Nitrogen Fertilizers, LLC failed to document how the facility will respond to ammonia inhalation or an ammonia burn in its Emergency Response Plan, as required by 40 CFR 68.95(a)(1)(ii).**

CRNF Response:

As described in its December letter, CRNF's Emergency Response Plan complies with the requirements of 68.95(a)(1), including documentation of proper first-aid and emergency medical treatment. The facility's Emergency Response Plan Section 5d - First Aid, contained both an emergency care and first aid procedure and indicated that specific chemical first aid procedures are available in the First Aid Station. The facility has a Licensed Health Care Professional on staff.

CRNF provided the ammonia first aid procedures for consideration during the inspection. The EPA Inspectors also reviewed the CRNF Safety Data Sheet, which identifies ammonia emergency care and response. The facility trains annually with the local area emergency responders, which includes an ammonia emergency scenario. CRNF does not believe this to be a noncompliance for RMP. Since the RMP inspection, CRNF has enhanced the Emergency Response Plan Annex 5 to include additional documentation of proper first-aid and emergency medical treatment for ammonia. The relevant excerpt from CRNF's Emergency Response Plan is included at Attachment 7 (page A5-7).

Please contact Ron McGill at rfmcgill@cvrenergy.com if you have any questions.

Sincerely,



Neal E. Barkley, P.E.
Vice President & Fertilizer Facility Manager